

REMARKS

The present Amendment amends claims 1, 6, 8 and 11 and leaves claims 2-5, 7, 9, 10 and 12-16 unchanged. Therefore, the present application has pending claims 1-16.

Applicants respectfully request the Examiner to contact Applicants' Attorney, the undersigned, to discuss the outstanding issues of the present application prior examination.

Claims 1, 6, 11 and 16 stand rejected under 35 USC §102(e) as being anticipated by Srinivasan (U.S. Patent No. 6,823,336). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1, 6, 11 and 16 are not taught or suggested by Srinivasan whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to claims 1, 6, 11 and 16 to more clearly describe features of the present invention. Particularly, amendments were made throughout claims 1, 6, 11 and 16 to more clearly recite that the present invention is directed to a storage system having a disk system and a file server which includes a main memory having a file system processing unit managing storage areas of a disk of the disk system so that files are correlated with data locations on the disk and a file system cache to be used by the file system processing unit, wherein the disk control unit of the disk system receives data of a file that has been updated in another storage and a history of file management information from another disk system through the

communication link without using another file server which is connected to the another disk system and stores the received data of a file and the history file management information on the disk system such that the file server refers to the history of the file management information on a disk system and updates the file management information in the file system cache in accordance with the update of the file performed in the another storage system.

The above described features of the present invention are illustrated, for example, in Fig. 3 of the present application wherein updated data from the storage system A can be supplied and received in the storage system B without using the file server of the storage system A. Thereafter, according to the present invention the file server of the storage system B, reads/refers to the history of the file management information on the disk system and updates the file management information in the file system cache in accordance with the update of the file performed in the storage system A.

The above described features of the present invention as now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention as now more clearly recited in the claims are not taught or suggested by Srinivasan whether taken individually or in combination with any of the other references of record.

Srinivasan teaches a data storage system which provides uninterrupted read access to a consistent data set concurrent with performing a series of revisions upon the data set. Srinivasan teaches the processing of a first set of revisions to form a directory of the first set of revision and then

processing a second set of revisions to form a directory of the second set of revisions and concurrently performing the first set of revision upon the data set and concurrently performing read access to specified data in the data set by accessing the directory of the first set of revisions to determined whether the specified data are in the first set of revisions and upon finding the specified data are in the first set of revisions, obtaining the specified data from the first set of revisions and upon finding that the specified data are not in the first set of revisions obtaining the specified data from the data set.

Particularly, Srinivasan teaches, for example, in col. 12, lines 8-34 and illustrates in Figs. 8 and 11 the data structures in the file system secondary storage of the secondary data storage system.

In the above-noted passage and figures of Srinivasan there is no teaching or suggestion of the above described features of the present invention now more clearly recited in the claims wherein the disk control unit of a storage system receives data of a file that has been updated in another storage system and a history file management information from another disk system through the communication link without using another file server which is connected to other disk system and stores the received data of a file and the history file management information on the disk system as in the present invention.

Further, there is no teaching or suggestion in Srinivasan that the file server of the storage system refers to the history of the file management information on the disk system and updates file management information in the file system cache in accordance with the update of the file performed in the other storage system as in the present invention.

Thus, Srinivasan fails to teach or suggest that the disk control unit receives data of a file that has been updated in another storage system and a history file management information from another disk system through the communication link without using another file server which is connected to the another disk system and stores the receives data of a file and the history of file management information on the disk system as recited in the claims.

Further, Srinivasan fails to teach or suggest that the file server refers to the history of the file management information on the disk system and updates the file management information in the file system cache in accordance with the update of the file performed in the other storage system as recited in the claims.

Therefore, Srinivasan fails to teach or suggest the features of the present invention as now more clearly recited in claims 1, 6, 11 and 16. Accordingly, reconsideration and withdrawal of the 35 USC §102(e) rejection of claims 1, 6, 11 and 16 as being anticipated by Srinivasan is respectfully requested.

Applicants acknowledge the Examiner's indication in the Office Action that claims 2-5, 7-10 and 12-15 are allowed.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1, 6, 11 and 16.

In view of the foregoing amendments and remarks, applicants submit that claims 1-16 are in condition for allowance. Accordingly, early allowance of claims 1-16 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (TMI-5151).

Respectfully submitted,

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